

IN THE CLAIMS

1. (Currently amended) A method for manufacturing a glass article having a length of 1000 mm or more, comprising:

    a first heating step of vertically inserting a soot preform synthesized by a vapor phase synthesis method into a furnace and heating the soot preform ~~at to~~ a temperature range of 1000°C to 1400°C inclusive in a reduced-pressure atmosphere so as to remove the gas remaining in the soot preform while effecting thermal shrinkage;

    a second heating step of heating the soot preform so as to vitrify the soot preform while the temperature at the surface of the soot preform is controlled within the range of 1400°C to 1480°C for a predetermined period of 70 minutes or more; and

    a step of cooling the glass article.

2. (Currently amended) A method for manufacturing a glass article according to Claim 1, wherein the first heating step comprises a degassing step of removing the gas to a predetermined vacuum level of 10 Pa or less ~~at while heating to a~~ temperature range of 1000°C ~~or to~~ 1300°C.

3. (Currently amended) A method for manufacturing a glass article, having a length of 1000 mm or more, comprising a first heating step of vertically inserting a soot preform synthesized by a vapor phase synthesis method into a furnace and heating the soot preform;

a second heating step of heating the soot preform at a vitrification temperature so as to vitrify the soot preform; and

a step of cooling the glass article,

wherein the first heating step comprises a degassing step of removing the gas remaining in the soot preform to a predetermined vacuum level of 10 Pa or less ~~at while heating to~~ a temperature range of 1000°C to 1300°C, and a thermal shrinking step of heating ~~at to~~ a temperature range of 1300°C to 1400°C in a predetermined vacuum level of 10 Pa or less, and

wherein, during the second heating step, the temperature at the surface of the soot preform is controlled within the range of 1400°C to 1480°C for a predetermined period of 70 minutes or more.

4. (Original) A method for manufacturing a glass article according to Claim 1, wherein the furnace is provided with a heater having a plurality of segments whose temperatures are independently controllable in the longitudinal direction such that the temperature of the soot preform can be controlled correspondingly in a plurality of parts in the longitudinal direction.

5. (Original) A method of manufacturing a glass article according to Claim 1, wherein, during each of the heating steps, a temperature at a furnace tube which separates a heater and the soot preform is determined and the temperature in each step is controlled based on the determined temperatures.

6. (Original) A method of manufacturing a glass article according to Claim 1, wherein, the soot preform is a composite preform comprising a transparent glass rod and a porous glass portion formed around the glass rod.

7. (Original) A method for manufacturing a glass article according to Claim 1, wherein, during the second heating step, the temperature at the surface of the soot preform is gradually or stepwise increased from the upper section toward the lower section.

8. (Cancelled)